Issue 06_Quarter 02_2012

Teaching technology

for education

How technology helps me teach...

FREE PRIZE DRAW

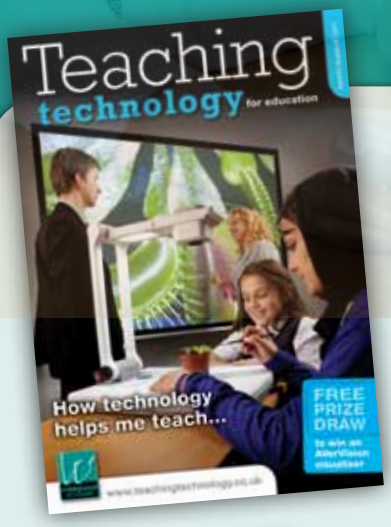
to win an Hitachi education projector...

Wedgwood AV Limited

www.teachingtechnology.co.uk

Teaching technology for education

Teaching Technology for education - how technology helps me teach www.teachingtechnology.co.uk



Teaching Technology for education is a free quarterly magazine for teachers and trainers. Available for free download at www.teachingtechnology.co.uk
In the resources area on the website you'll find free AV guides, manufacturers' product videos, links to curriculum materials and features on new technology.

Free current and back issues. If you'd like to receive an email (we do not spam) when a new issue is ready for downloading, please send your contact details to **subscriptions@teachingtechnology.co.uk**

RepeatSignage 2011
Repeat Signage 2011
Digital Signage Solutions
The most versatile, yet easy to use digital signage software around...
www.repeatsignage.com

Win 1 of 10 copies of Repeat Signage digital signage software

FREE PRIZE DRAW

to win an Hitachi CP-X2021WN projector. Please see back page for details of prize and how to enter.

Hitachi ultra short-throw projector

TEACHING TECHNOLOGY EDITOR
Linda Adams
editor@teachingtechnology.co.uk

EDITORIAL
Contributions should be sent to the editor at the above address. Every care is taken of materials sent for publication, however these are submitted at the sender's risk. The views expressed within are of the contributors, and not necessarily the TT.

PRODUCTION
Wedgwood AV Ltd
01754 769967

MAGAZINE COPIES
Free quarterly issues from
www.teachingtechnology.co.uk

All information, models and prices are accurate to the best of our knowledge, at the time of writing and are intended as a guideline only. You are advised to consult individual manufacturers specification sheets on interested products.

Wedgwood AV Ltd is registered in England with registered number 3514877.

Copyright 2011-2012 Wedgwood AV Ltd. All rights reserved. Corporate names and trademarks are the property of their respective companies. Specifications subject to change without notice.

Welcome

It's good to get out and about and visit schools to see how teachers are using new technology to help them in the classroom.

We were warmly welcomed to Skegness Junior School in Lincolnshire, to see how their Deputy Head, Darren Price, and his team are using iPads to teach and inspire their children in a variety of lessons. You can read all about this on page 24. Darren is keen to link with other schools using the same technologies to collaborate and move teaching and learning forwards.

David Marsden, ICT Network Manager at Westholme School, Lancashire, tells us how using Repeat Signage digital signage software has saved them hundreds in not thousands of pounds compared to paying an outside company to install and provide content for their screens. More information on this on page 12.

We're off the O2 Arena in London shortly to an exhibition of new technology and will be reporting on this in our next issue.

We would also like to hear from you if you have any questions about new technologies that you'd like us to put forward to manufacturers, or even if you want to send in an article or have us contact you so you can share your experiences with other colleagues.

Best wishes. Your editor, Linda Adams editor@teachingtechnology.co.uk

Contents

04 Interactive classroom technology

06 Panasonic confirms commitment to support Sanyo customers and products

08 Case study: Learning made easy

10 Presenting practical solutions for teaching

12 Repeat Signage delivers information to students at Westholme School

14 Video walls and content

18 Large format displays and touchscreens for public areas

20 Eiki projects their range

22 AV cables and connectivity

23 A sound solution for classroom installations

24 New technology enhances learning at Skegness Junior School

26 Prize winners

27 iPad mounts, arms and security solutions

28 NEC interactive whiteboard kit

29 Sound systems

30 Prize draws

Interactive classroom technology

Interactivity is a valuable classroom asset. Hitachi has an innovative solution that gives you interactivity anywhere there is a flat surface, an existing dry-erase whiteboard or even a bare wall.

ULTIMATE 究極
INTERACTIVE

Hitachi iPJ-AW250NM

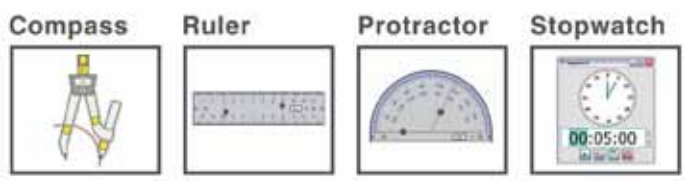
Bringing learning to life

Interactive learning for the classroom offers tremendous potential for improving the learning process. The Hitachi iPJ-AW250NM projector, part of Hitachi's Ultimate range, makes it simple to provide interactive teaching. Its short throw distance and compact design enables it to be installed virtually anywhere, and powerful enough to provide clear images even in bright environments.

Unlike conventional projectors, this interactive projector incorporates sensors that detect activity on the screen area. Together with well established Hitachi StarBoard™ software, it allows users to annotate and interact with the material presented. Instead of simply showing students static images, students and teachers can interact with on screen material, engaging and involving them to bring learning to life.

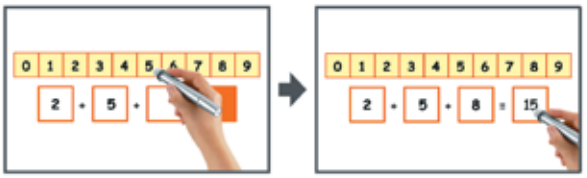
Combining the interactivity of a whiteboard with the interactive power of a PC creates a powerful learning and teaching platform. It compels attention and involvement and can be used at all levels, from reception classes to postgraduate tutorials.

Use familiar tools to create understanding

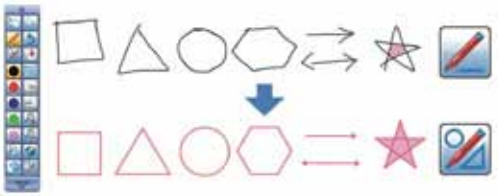


The interactive pen lets you operate a compass, ruler, protractor, stopwatch and other familiar classroom tools on the projected image, making lessons easier to understand and techniques easier for pupils to follow.

Flash™ file: adding 1 digit numbers 1



Convert ideas into clear words and images

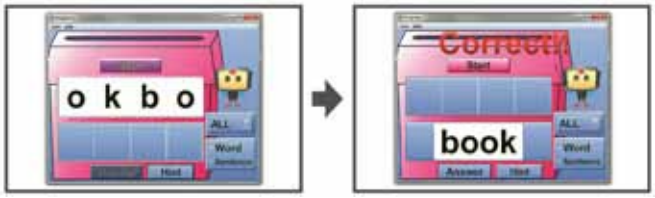


The iPJ-AW250NM includes software to make interactivity productive, even for young and uncertain students. The special interactive pen lets users see their freehand shapes automatically converted into geometric objects on the projected image. Converting handwriting into text is simple too, building confidence.

A wealth of interactive material ready for you use in your classroom

Hitachi StarBoard™ software builds lessons with interactive Flash™ files and clip art from the gallery. There are also four subject toolboxes including Geography, Languages, Arts, Maths and Science, all ready to use. Even spelling is fun. Students can drag and drop letters to make words.

Language Arts: Anagrams



The Hitachi iPJ-AW250NM projector includes software to make interactivity productive, even for young and uncertain students. The special interactive pen lets users see their freehand shapes automatically convert into geometric objects on the projected image. Converting handwriting into text is simple too, building confidence.

Ultra short throw technology

Short throw projectors make installation simple, even in crowded and compact classrooms. But ultimate short throw does more. Hitachi's Ultimate short throw projectors achieve optimum image quality, with 8-point adjustment that includes all four corners and sides, allowing distortions to be eliminated, even on imperfect walls, ensuring your projector can go to work anywhere.

Projecting large bright images onto any school wall provides opportunities to improve the learning experience

> Drama - present large scenery images directly onto a bare wall, stage or backdrop.

> Physical education - display dance moves or team positions onto a gym wall and annotate them as the lesson progresses using the interactive pen.

>Geography and mathematics - use the pre-stored graphs, maps and tools to ensure explanations are clear and visual.

>Parents evening - present large images of students' work onto a school wall for everyone to see.

- 01754 769967
- sales@wedgwood-group.com
- www.wedgwood-group.com

Hitachi are happy to demonstrate their range of education projectors at your school or college.

Panasonic confirms commitment to support Sanyo customers and products

Panasonic Corporation announced that following the completion of its acquisition of Sanyo Corporation on January 1, 2012 a new projector business unit has been formed

Panasonic PT-TW231R

Panasonic new projector business unit

This now integrates R&D, Engineering, Manufacturing, Product Planning, Marketing, bringing to market a stronger product range that better meets the needs of customers. With the establishment of this new business unit Panasonic ceased production of Sanyo branded projectors at the end of March 2012.

Panasonic commits that all Sanyo branded products will continue to carry the standard manufacturer warranty even if they were sold after the Sanyo brand was officially withdrawn from the market on 31st March 2012. Arrangements have been made within the Panasonic group to ensure that all Sanyo warranties are provisioned and supported in the future. End-users who experience any problem with their Sanyo branded products during the warranty period should refer to their original supplier for advice.

In the case that you need support to locate your local repair centre, you can call Panasonic's European Projector Call Centre for advice. All contact details can be found at www.panasonic-projectors.eu/en/support/

Panasonic have introduced two new projectors and interactive whiteboards for education and training.

Panasonic PT-TW231R

Panasonic's short-throw projector with interactive function allows you to project an 80-inch diagonal image from 86cm (2.8 ft) away from the projection screen or whiteboard.

The projector can be placed next to the screen, which allows you to stand in front of the image without your shadow being cast on the image.

This model is equipped with a feedback camera for the interactive function, which enables text, graphics or lines to be written onto projected images. A pen and a pointer containing infrared sensors are included.

Multi Projector Monitoring & Control Software allows multiple projectors to be managed together over a wired local area network (LAN).

The PT-TW231R has convenient functions including Direct Power Off that allows the room's main power to be turned off immediately after use. The startup screen can be customised using the Logo Transfer software (compatible with Windows® XP, Windows Vista®, and Windows® 7) from the Panasonic website to customise the projector and/or for theft protection.

Panasonic PT-CW230 ultra short-throw, 3D Ready projector for classrooms

Panasonic's innovative ultra short-throw projector gives you an 80-inch diagonal image from a short distance of 32cm. The distance between the projector and the screen (or whiteboard) surface can be as short as 2.4cm.

The projector can be placed next to the screen, which allows you to stand in front of the image without your shadow being cast on the image.

There are flexible projection settings for versatile applications, including tabletop installation for wall projection, floor projection, ceiling projection and wall-mounted installation for wall projection.

The PT-CW230, with 2,500 ANSI lumens brightness has widescreen resolution (1280x800 pixels, WXGA, 16:10 aspect ratio), and a 10 watt speaker built-in. The filter and lamp are easily replaced from the top of the projector even when it is installed on the ceiling.

The PT-CW230 has long replacement cycle of up to 3,000 hours for the lamp and up to 4,000 hours for the air filter.

This model has some useful features including Direct Power Off, which allows the room's main power to be turned off immediately after use. Presentation support/control tools include Presentation Timer, Freeze Function and digital zoom.

Panasonic
UB-T580 / UB-T580W
with optional stand

Panasonic UB-T580 / UB-T580W

Panasonic's Elite Panaboard interactive whiteboard helps you grab your students' attention. It makes it easy to create effective, eye-catching teaching materials and promotes active, visual-based teaching and learning that make the classroom fun for both teacher and students.

By connecting a PC with Internet access and a projector, you can incorporate live web content into your lesson, and even manipulate and save PC files on the board.

Panasonic's IR (infrared) whiteboard lets you interact on the board with stylus or your finger. Easiteach education software is included and this allows you to create an interactive lesson for your students. The whiteboard is USB powered so the only connection you need is a USB cable into your laptop or PC, no other power is required. This makes it very eco-friendly as a product. The UB-T580 is 4:3 format, 77-inch across and the UB-T580W is widescreen 16:9, 86-inches across. You can use any projection with the board but the ultra short-throw projector sits nice and close to the board and this means that there is no light shining in your eyes, neither is there any shadow.

A key feature of Easiteach software is that when you write on the board using the stylus it automatically changes it into typed text and you can then move it around the board and do anything you want with it, such as changing size or colour. The software includes a gallery of about 5,000 images and it supports all gesturing (zoom, pinch, etc) in a Windows® 7 environment.

The stylus pen is included although there is an optional multi-functional electronic pen which integrates a choice of four different colours, an eraser, and a remote control for operating PowerPoint® slides, all in one tool.

CASE STUDY

NEC

Empowered by Innovation

Learning made easy

EDU

NEC 3D DLP® projectors successfully tested in three Dutch schools. When Sjaak Hoek, teacher at the ''De Bonte Pael'' school near Amsterdam, starts his 3D presentation about the heart, the whole class becomes silent. The boys and girls of the primary education class are fascinated by the secrets of the human blood system. The lesson forms part of a research project among three Dutch and a number of international schools.

The goal

The goal is to explore the use of 3D learning technologies in the education sector. Thus far, the results are very promising. NEC Display Solutions Europe, provider of modern 2D and 3D projection technologies, is one of the project partners. The company has gathered some interesting findings about the teachers and pupils who are using the system.

The challenge

The Laurentius group, head of the three participating schools, De Bonte Pael, De Piramide and De Wilgenhoek intend to give their pupils a modern and pedagogically up-to-date learning experience. As part of the pan-European LIFE project, which aims to investigate academic learning supported by 2D and 3D technologies, they were equipped with the equivalent technologies. Texas Instruments, DLP technology innovator, supports the project with technical know-how and the latest hardware. The project is being coordinated by Professor Anne Bamford, an internationally renowned British education expert, who is in charge of delivering the project and evaluating its results.

Modern 3D content, tailored for the needs of young students, offers endless possibilities. Easier than ever before, it is now possible to gain an insight into complex and difficult topics from fields like biology, physics and chemistry. As many children have some 3D experience from movies and video games, they easily adapt to the new viewing experience.

The results

The three schools have been testing 3D DLP projection in biology lessons where there are children aged from 8 to 12. So far, the teachers have given very positive feedback about the experience:

“I think that the children pay more attention now. They always seem very focused when I teach something in 3D. In my class there are a couple of children who suffer from concentration issues like HDD and HDHD and whenever they put on their 3D glasses they are totally focused,” says Vera den Dekker, teacher in De Piramide School. She states the main achievement is that children are able to remember a greater amount of information and can talk much more about the topic after the lesson is finished. “They do ask more questions and whenever I ask something they know the appropriate answer in greater detail.”

Sjaak Hoeg, teacher from De Boente Pael school, who has already given three lessons in 3D on the subject ‘Human senses’, agrees. “The children said: ‘Now I understand much better how the heart works’. This is due to the fact that they can turn around the model and see all the veins and the chambers of the heart.”

Eric de Jong, teacher in the De Wilgenhoek School, has been working with 3D technology for about three months now. He says children do react differently in lessons where 3D is used.

NEC U-Series

"They ask more questions like 'Can we turn around the model to see better how the blood flows?' That was very interesting.

Deborah van der Kuil-Jansen, ICT Coordinator of Laurentius Stichting sums up the reasons why the school operating group should make use of 3D as a normal element available in any school: "We know that children learn in different ways. Some memorize and understand topics better by reading about them, others are best when they are provided with moving images. As a school we need to be able to offer every single one of these different methods. I am convinced that we have found the right technology now."

Using technology in lessons has proven to be an efficient method for education. Professor Anne Bamford describes a distinct, measurable impact in all the schools across Europe that are involved in the LiFE 1 project. "The content that was taught was noticeably more present in before-after comparisons; the children were far better able to retain the material," according to Bamford. "Many of the children said 'I understand much better now how hearing works'.""We are really grateful to have been part of this experience. From the hardware point of view, it seems like everything is working fine.

The NEC solution

NEC offers two different product ranges which support 3D projection with DLP link. One is the V Series, which is a very competitive entry level standard projector range with rich feature-set and low cost of ownership.

The more school oriented range however is the ultra-short throw models of the U Series. Ultra-short throw projectors do not have to be installed at the other end of the room or suspended from the ceiling, but let teachers project onto a screen from only inches away. They produce no distracting shadows, and teachers are free to move around the room or stand right in front of the class.

- **01754 769967**
- **sales@wedgwood-group.com**
- **www.wedgwood-group.com**

Presenting practical solutions for teaching

Over recent years educational institutions have experienced a vast increase in the technological teaching aids available to them

Turning Leaf has been a manufacturer of AV furniture for nearly 10 years. Over the years it has come to understand the needs of its customers and this is most prevalent with the education sector. They have listened to the needs of teachers and lecturers to understand the most practical and affordable way to produce their products. Over recent years educational institutions have experienced a vast increase in the technological teaching aids available to them. 20 years ago, the sight of a blackboard was commonplace in a teaching room alongside the analogue overhead projector. So much has changed; and the opportunities are endless. Educators are now faced with a wide variety of technology, designed specifically to help them do their jobs more effectively; and to further engage their pupils and students interactively.

An AV lectern for instance, can be used in a number of different ways; to hold your AV equipment, laptop, open book, microphone or light. You may also need the lectern to be mobile and light enough to be moved between classrooms.

On the days you will be presenting the school with awards or listening to key speakers then you may not require the lectern to incorporate any AV equipment, perhaps just a microphone and light. Turning Leaf have found that schools and colleges like a wood veneer finish lectern with a smart school logo on to complete the look.

From the classroom to the school hall to the lecture theatre Turning Leaf has traditional and contemporary furniture. Their product range is available in various finishes, for example, oak, ash, maple, cherry, beech, walnut and mahogany in either melamine or real wood veneer.

Customised solutions can be designed to ensure more bespoke project needs are met particularly in environments where standard pieces of furniture will simple not accommodate the equipment appropriately.

Custom cut outs

Optional extras help you personalise lecterns and cabinets by adding drop down shelves, pull out keyboard shelf, castors, microphones, lights covers and control housing.

Keyboard shelf

Microphone

Lighting pack

Safety and security are important and lockable AV cabinets serve two purposes. They provide a secure place for your AV equipment, which is all in one place when you need it for teaching or lectures. Being mobile, you can share resources such as a projector, by moving the AV cabinet from room to room as needed, rather than have one projector installed in each room.

• 01754 769967 • sales@wedgwood-group.com • www.wedgwood-group.com

SUCCESS STORY

Repeat Signage delivers information to students at Westholme School

Rationale: The School was looking for an easy and engaging way to deliver information to students and get them more interested in current affairs and digital signage was the perfect solution.

"We are very happy with the impact that the screens have had and the simple software and hardware setup meant we were able to do everything in house keeping the costs down.

Using Repeat Signage digital signage software has saved us hundreds if not thousands of pounds compared to paying for an outside company to install and provide content for our screens."
David Marsden, ICT Network Manager
Westholme School, Lancashire

Solution

We purchased all the necessary hardware from Wedgwood and with a little help from our maintenance team we had the screens and cabling installed in the space of one afternoon.

The school now has 3 digital signage screens covering our main reception and our school's theatre.

Initially we used PowerPoint but this didn't give us the flexibility we needed so we purchased Repeat Signage.

Repeat Signage enabled us to design screens that were flexible and easy to update. After initial design work by myself I've managed to pass all updates on to our receptionists. Staff that want messages displaying on the screens simply hand their requests into reception and the receptionists handle all the updates. Due to Repeat Signage's easy user interface staff required very little training and found that their current Microsoft Office skills were transferable to Repeat Signage.

Design

Our digital signage displays incorporate school notices, News Feeds, Weather Feeds and advertisements for up and coming school events. The screens are also very versatile so we can switch the screens from primarily focusing on School notices during the day to focusing advertising during the evening when the theatre is in use.

Conclusion

We are very happy with the impact that the screens have had and the simple software and hardware setup meant we were able to do everything in house keeping the costs down. Using Repeat Digital Signage has saved us hundreds if not thousands of pounds compared to paying for an outside company to install and provide content for our screens.

You can download the evaluation software without giving your details.
www.repeatsoftware.com

Westholme School

Westholme School in Lancashire is an independent day school for pupils aged 2-18.

WESTHOLME SCHOOL

RepeatSignage 2011
Digital Signage Solutions
The most versatile, yet easy to use digital signage software around...
www.repeatsignage.com

RepeatSoftware 2011

Repeat Signage lets you insert pictures, text, clocks, shapes, .PDFs, etc., into your presentation. Then you save this and can schedule it to play over your local network at different times. For example, you could display school information 9-12 am, then display lunchtime menu 12-1pm, followed by students' artwork. In the evening you can display advertisements whilst the theatre is in use, or other school based activities.

• 01754 769967 • sales@wedgwood-group.com • www.wedgwood-group.com

Video walls and content

Introducing video walls for schools and higher education

A video wall is simply a bank of screens onto which you display content, either on single screens or expand the content across the whole wall. Video walls can be 2x2 (4 screen panels) up to a 10x10 video wall.

Spectacular video walls work better when the image is large and clear and not obstructed by big bezels (the outer edge of the screen). Screens with almost seamless bezels are available, but these are more expensive. Screens designed for public display are ideal as these are built to last, have better connections and better warranties than screens designed for consumer use (like your TV at home).

CYP Complete 2x2 Video Wall System

For simplicity, let's start our examples by looking at displaying content on two screens. Some computers have two outputs (VGA) so you can show the same content on two screens. On Windows XP, in the control panel - displays, you can select a second monitor or screen and do one of two things. You can extend the desktop so that the image is spread across both your computer screen and the second screen, or you can duplicate the image you see on your computer screen, so that it appears on the second screen.

Obviously, this only allows you to show the same content on both screens. When you want to display content on four screens you need a 4-port graphics card, or two 2-port graphics cards or you can use a splitter box, which splits the signal.

A 2x2 video wall,comprising 4 screens, in a reception area is an ideal starting point for education.

Manufacturers such as CYP, LG, Mitsubishi, NEC, Panasonic, Samsung, Sharp and Sony have large format display screens suitable for video walls. These range from 2x2 video wall up to a 10x10 video wall.

Depending on make and model, the size of the bezels vary. Some screens have option slots to slide in a built-in PC. Some allow you to daisy chain the screens together so you can easily add more screens to your video wall at a future date. Screens range from WXGA to 1920x1080 Full HD (high definition) resolution.

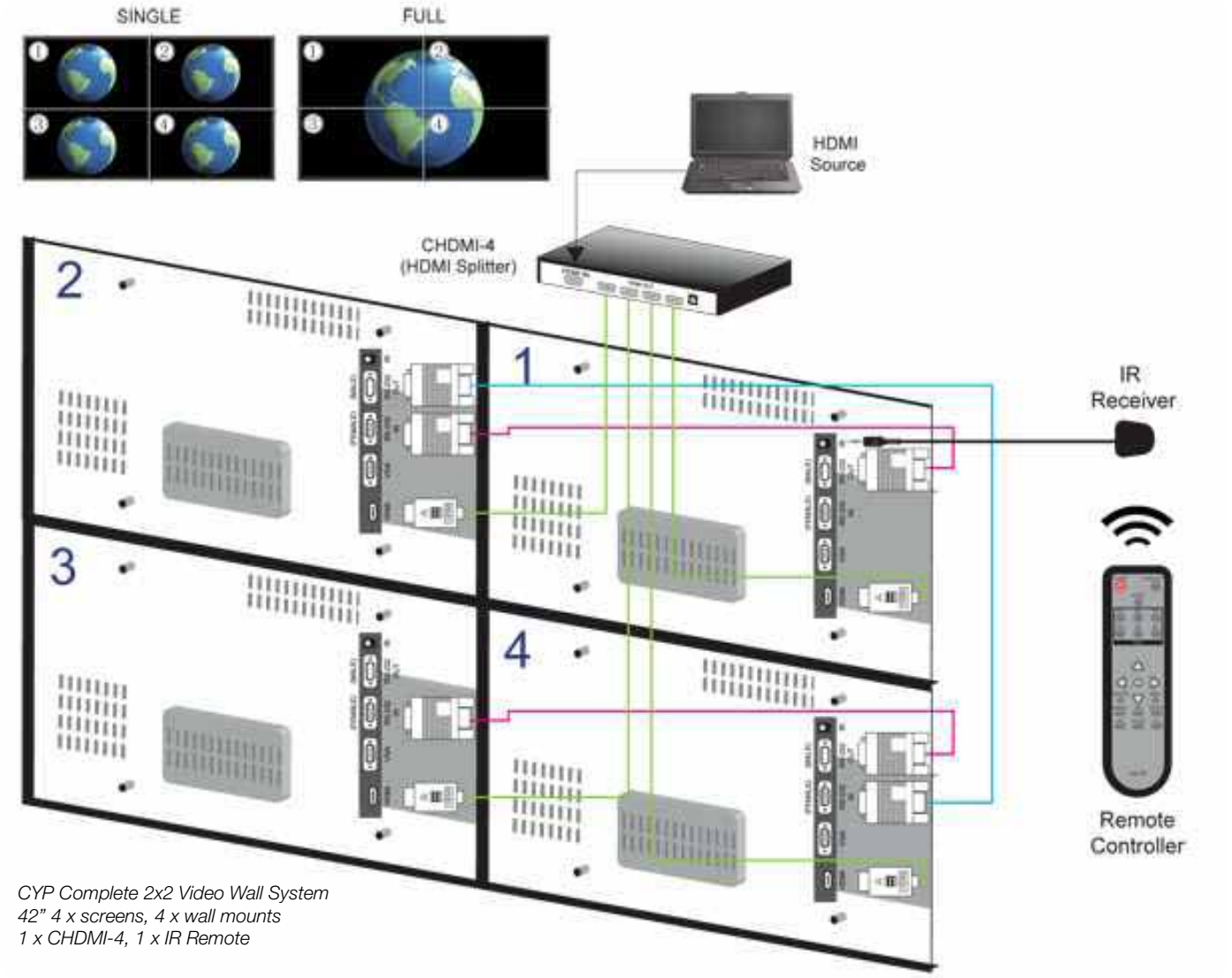
I'm considering a 2x2 video wall in my reception area to display PowerPoint or images. What do I need?

As an example, let's assume you want a 2x2 video wall in your reception area, to display a PowerPoint presentation.

Some screen manufacturers offer a complete video wall solution which includes all you need in the way of screens, wall mounts and splitters.

CYP's complete 2x2 video wall system, for example, has four 42-inch diagonal LED screens, four wall mounts, one HDMI 4-way splitter box and one IR (infrared) remote control.

Examples of video walls - left to right: Sharp thin bezel screens, Mitsubishi LCD large format displays, NEC X463UN thin bezel large format displays



CYP Complete 2x2 Video Wall System
42" 4 x screens, 4 x wall mounts
1 x CHDMI-4, 1 x IR Remote

CHDMI-4 4-way splitter box
1 in and 4 out - front and back views

Your PC connects from the HDMI output into the 4-way splitter box and then out from each of the splitter box's 4 HDMI ports into the HDMI port in each of the four screens.

You can then display your PowerPoint presentation or image on each of the four single screens or expand it across all four screens.

As these screens are daisy chained, when other screens are added to the wall, they 'talk' to each other and send images to where they are supposed to go. Obviously, if you added other screens, for example, making it a 3x3 video wall, then you'd need a 10-way splitter box.

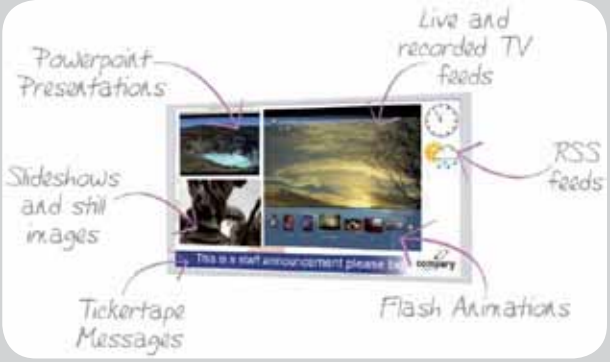
So what happens when I want to show different content on my video wall?

To show different content you need separate outputs. You could use a graphics card, for example, 2 VGA and 1 HDMI card would let you show content on three screens. Some graphics cards have a break-out cable to input into eight screens.

A matrix switcher lets you show different content on screens. One with 4 inputs and 4 outputs, for example, lets you input 4 different devices, a computer, Sky box, digital signage player, etc., and then each outputs to a separate screen, to display its own content.

CYP OR-YUV443
Matrix switcher

What the matrix does is switch any four inputs into any four outputs. The advantage is you can switch contents from screen to screen, for example, have a Sky box on one input to show Sky TV on one screen, input a signage player or computer into the other three screens to show different content on all screens. Screens can also go in a horizontal line, they do not need to be in two banks of two.



Luminis AiO hardware / software digital signage solution

I'd like to have digital signage on my video wall, what else do I need and can you give me ideas of what's available?

You will need digital signage software and either a signage player (also called a media player) or a spare PC in order to play the presentation onto the screens.

Clever Little Box Luminis AiO (all-in-one) digital signage system is a media player (also called a signage player), preloaded with their digital signage software. It is plug-in and play and can be used stand-alone or on a network and controlled locally or via a web browser. Landscape or portrait display options.

Luminis AiO, has only one output so you can only send the content to one screen. The splitter box will allow this content to be displayed on each of the four screens (using our 2x2 video wall example), or you can display it across all four screens. You can change content and schedule content to play at different times of the day, and using the splitter box you can display this content on one or more screens. However, if you want to be able to show different signage presentations on all four screens, you will need four Luminis signage players with preloaded software, each showing its own presentation, and a matrix switcher.

Repeat Signage is truly flexible digital signage software for Windows. It allows pixel-by-pixel control of displays including plasma screens, LCD monitors and projectors. Now with touch screen support.

Repeat Signage is digital download only. The Standard Edition is designed to be used over local area network (LAN) and can display scheduled content onto one or two screens. You can play your presentation on a spare computer or media player (mini PC). With the Standard Edition you can use it with two screens for a single licence.

Repeat Signage lets you display a variety of media including pictures, animated gifs, video, RSS feeds, Flash clocks, PowerPoint, webcam, web browser, etc.

Repeat Signage Professional is designed to be used over a wide area network (WAN), updating any new content onto screens wherever they may be located.

A+K PADS Professional digital signage software lets you design, schedule and distribute content across multiple locations and/or networked environments.

PADS Professional is a bundle of applications for Windows: Designer allows you to compose presentations with any possible content including PowerPoint, YouTube videos, Macromedia Flash content, live TV, ticker tapes linked to RSS feeds and Internet pages. Manager allows you to decide where and when your presentation you have designed is shown. PADS Viewer ensures that your scheduled content is played at the right moment on the display screen.

PADS Professional has options to choose the software and/or media player(s) for any number of screens.

Digital signage software can also be displayed from the computer or signage player through a projector onto a large projection screen. It can also be displayed onto desktop screens, for example, in a reception area to display information for students and visitors about current or forthcoming events.

Digital signage software, such as Repeat Signage, which has touchscreen support, can be displayed on an LCD touchscreen, for example, on a reception desk. This allows visitors to check-in, request brochures, etc.

The reason a digital signage player or dedicated PC is needed to display each of your signage presentations is because it is not practical to have your normal computer you use daily, playing out signage. In most environments, there are usually some spare old computers lying around, so one can be used to play signage software. However, do check it has a suitable VGA or HDMI port to use with your screen or video wall. You can buy an inexpensive graphics card with an HDMI output, to replace the old computer's existing graphics card, if need be.

The market for touchscreens is growing and currently there is very little digital signage software for touchscreens. To display your signage presentation on a desktop touchscreen in the reception area, for instance, you could place the computer or signage player box beneath the reception counter. However, if you wanted to wall mount a larger touchscreen, for example, a 42-inch diagonal touchscreen, for your signage, but you want to have the computer

Repeat Signage digital signage software

A+K PADS digital signage for multi-screen solutions

or player elsewhere, there are little box solutions that allow you to send the signage up to 100m, to enable your computer to update the signage presentation away from the screen.

Large format display screens with slot-in PC options

Another option to using a computer or signage player to display content across your screens, is to opt for a large format display or high-end projector that has the option of a slot-in PC.

There are various types of slot-in PC's such as NEC Slot-in PC Atom or NEC Slot-in PC Celeron. It is important of course, to ensure that the correct slot-in PC is chosen for your special needs.

On the back of NEC's P-series or V-series large format public display screens, you remove the small cover to reveal the slot-in area, place the PC into the slot and place a ventilated cover over the PC. You then start up the PC using the screen's remote control and install your software.

NEC slot-in PC

We tested Repeat Signage digital signage software using an NEC Slot-In PC Celeron, downloaded the software from www.repeatsoftware.com and designed a presentation directly onto the NEC P-series 42-inch display screen. You can download a free trial of Repeat Signage at www.repeatsoftware.com

Large format display screens

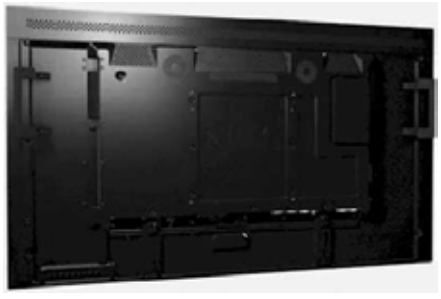
Samsung have a range of public displays for video walls, with slide-in PC options. Samsung have their own digital signage software, MagicInfo, which is downloadable free from their website. The Samsung UE46A 46-inch LED slim video wall display screen has built-in MagicInfo Lite digital signage software.

Mitsubishi MDT series of slim LCD public displays are available in 42-inch, 55-inch and 65-inch diagonal sizes. The aluminium bezel has no logo so that they can be used landscape or portrait. The 55-inch model can be used in-floor or as a face-up tabletop.

Sony Professional has software and hardware digital signage solutions. Its award-winning Digital Video Wall System, Ziris Canvas, makes for a focal piece for reception areas or school halls. With Ziris Canvas, you can have a mix of different screen sizes, in portrait, landscape or arbitrary angled rotations. Sony's range of BRAVIA Professional Displays includes nine full HD models with screen sizes ranging from 32" to 65" with a built in RS232C-HDMI converter box for remote monitor control and ease of use within education environments.

LG professional displays have tile-mode, this enables you to set up stunning video walls easily and efficiently. LG also have dedicated 47" and 55" LED video wall displays which have super narrow bezels.

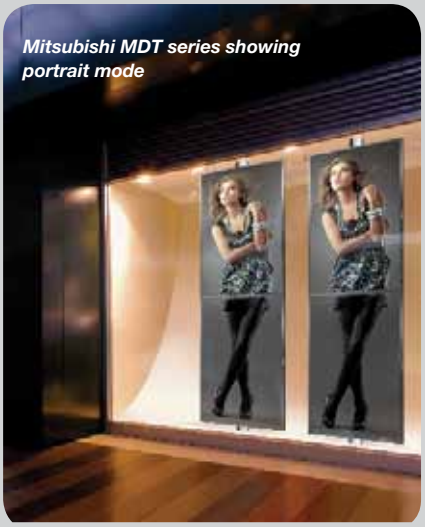
The LG 47WV30 is a super slim 6.9mm bezel video wall – a breakthrough in slim design. The 47" LED screens can be built to a maximum of 15 x 15 to give your video content the attention it demands.



NEC slot-in PC slots into the back of selected screen models

Comparisons, manufacturers' brochures, current sizes and street prices are available at www.lcd-monitors.co.uk

Samsung UE46A



Mitsubishi MDT series showing portrait mode

Sony Ziris Canvas Digital Video Wall System

LG 47WV30 in 3x3 video wall

Wedgwood publishes a Touchscreen guide and a Digital Signage guide, free from: **www.teachingtechnology.co.uk**

Large format displays and touchscreens for public areas

Full HD LCD large format displays with or without multi-touch

iiyama

iiyama are probably best known for their desktop LCD screens and touch screens. They have now brought out full HD large format displays and touch screens for public areas such as receptions, restaurants and training/ conference rooms.

We all know what an important part touch screen technology can play in learning and can be an invaluable aid in keeping students' attention for longer.

Traditionally single-point touch screens have been the favourite choice, however, more and more complex, yet more interactive, technologies have emerged, including the new range of large format touchscreen displays from iiyama.

In sizes 42-inch, 55-inch and 65-inch diagonal, these use optical touch technology. This touch technology does not require an overlay or substrate to register a touch, so it's impossible to physically 'wear out' the touchscreen. In fact you don't have to physically touch the screen, you just put your finger (gloved or not) or any kind of stylus very close to it. The multi-touch functionality is supported under Windows® 7 only.

The 42-inch touch screens have IPS panel technology which means they have higher contrast, darker blacks and much better viewing angles than standard TN technology, so the screen will look good whichever angle you view from.

The 55-inch and 65-inch touchscreens use MVA technology which also give higher contrast, darker blacks and better view angles than standard TN technology.

Security is always an issue in education environments and the key lock feature enables you to lock and unlock controls thereby preventing unauthorised changes to any settings you have made.

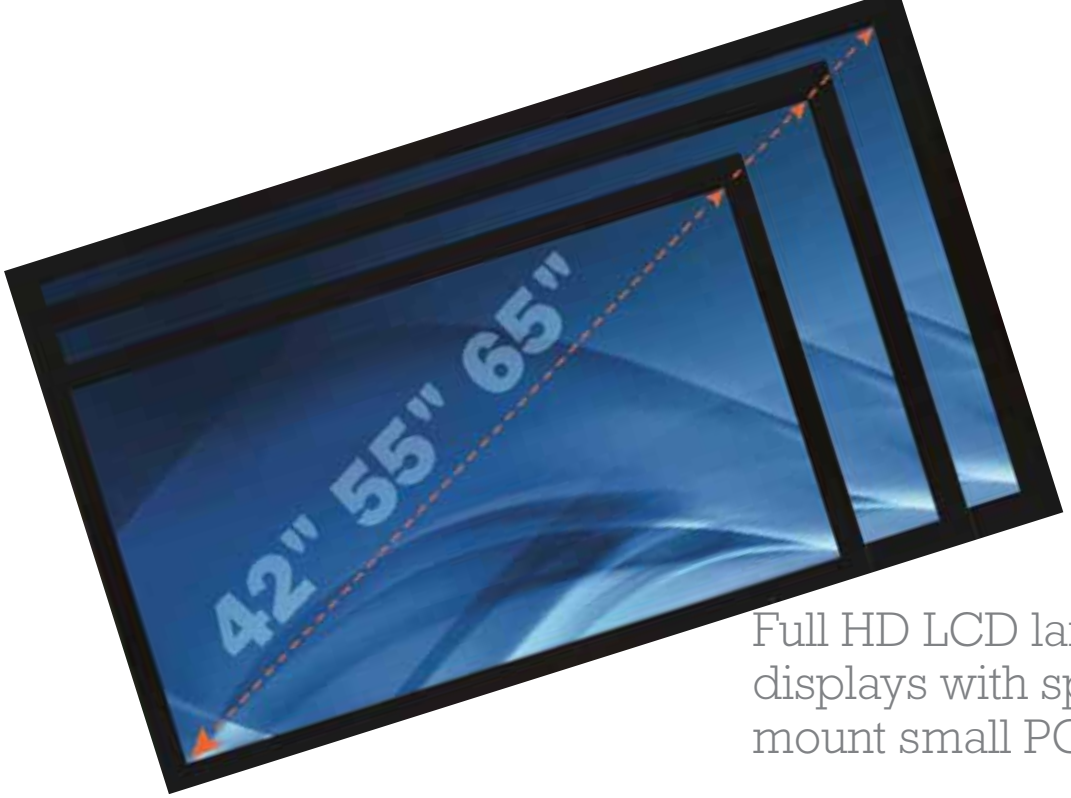
Where you want to display digital signage presentations and need a computer to play out your signage, these touch screens have a neat little feature called an IPC Space. This IPC Space at the back of the panel allows you to mount a small PC or a media player to the large format display screen.

All three screen sizes have picture in picture (PIP) function which allows you to watch images coming from two different sources at the same time. However, the 55-inch and 65-inch sizes also have picture by picture (PBP) function. When this is activated the screen is divided in half while displaying images from multiple sources.

IPC Space

Picture in Picture

Picture by Picture



Full HD LCD large format displays with space to mount small PCs

Large format displays (LFD) are ideal in education and training establishments especially in public areas such as reception, restaurants, libraries, museums, theatres and other areas frequented by staff, students and visitors.

iiyama displays without touch suit most applications including production facilities, exhibiting artwork and artefacts and also digital signage.

For instance, you could use digital signage as a means to give information about your school, college, university, library or museum to students and visitors about forthcoming events as well as displaying students' work or menus for the restaurant.

You could make your initial purchase of display screens, digital signage software and small PC pay for itself by running digital signage advertisements for local companies for products or services of benefit to your students, staff and visitors. For example, you could advertise the services of local piano and guitar teachers, aerobics and dance fitness classes, local amateur dramatic society plays or arts and culture events taking place in your local area.

You have probably seen the small screens above post office counters which display advertisements. These are normally run by companies who provide the screens and advertisements and charge companies for their services.

By budgeting for the initial expenditure yourselves you are in charge of the content and can make revenue that can be used to purchase other items for your educational establishments.

Most environments have an IT department and it is possible to have screens installed, set-up and a basic digital signage presentation up and running within a day.

You can always start by displaying PowerPoint presentations and then move onto digital signage software when you want to start scheduling various content at different times of the day.

iiyama large format displays are all full HD professional screens which mean they are better built than the consumer TV screens you have at home, are more robust, have features including IPC Space, and depending on the size chosen, have picture in picture and/or picture by picture.

The IPS or MVA technology ensures good viewing from all angles, high brightness and good colour clarity.

The screens have built-in stereo speakers for a rich sound and a wide range of video and audio inputs ensures compatibility with multiple platforms.

The screens also feature an ambient light sensor (picture below) that delivers exceptional performance with the added benefit of saving power. What the light sensor does is detect changes in environmental lighting conditions and automatically adjusts the screens backlight brightness to compensate for increase and decrease in light.

Ambient light sensor

• 01754 769967 • sales@wedgwood-group.com • www.wedgwood-group.com

Eiki projects their range from schools to universities

With the recent announcement about the demise of the Sanyo brand, you may find it becomes increasingly difficult to source the models you have specified. Help is at hand.

Fortunately, for most Sanyo projectors there is an Eiki equivalent. In fact, as OEM projectors, they are exactly the same products but with a different badge. Eiki projectors come with extended warranties – up to five years.

To find a Sanyo replacement, please click here to view the comparison chart which tells you which models are the Sanyo equivalent. Comparison chart kindly provided by Audio Visual Materials Ltd., Eiki's distribution representative in the UK.

Eiki LC-XSP2600/XIP2610

The LC-XSP2600 ultra short-throw projector is ideal for classrooms that are equipped with interactive whiteboards. It has XGA resolution, 2,600 ANSI lumens brightness and can achieve an 80-inch diagonal image from 1m away from the board. The projector has manufacturer 3 year deinstall/reinstall warranty for peace of mind as well as a 3 year lamp warranty.

Where you have widescreen interactive whiteboards in your classroom, then the Eiki LC-WSP3000 widescreen ultra-short throw with 3,000 ANSI lumens projector is ideal.

Where you have classrooms that are equipped with dry-erase whiteboards and you do not want to have the expense of replacing these with interactive boards, then Eiki has a solution for you.

The LC-XIP2610 XGA ultra-short throw projector and its widescreen equivalent the LC-WIP3000, are both fully interactive. This means you can project an 80-inch diagaonal image onto the dry-erase board from 1m away, and then annotate on the board over the projected image.

Where your teaching area doesn't warrant an ultra short-throw projector, Eiki has the LC-XBM21, XBM26 and XBM31models have built-in microphone connection with 10 Watt speaker.

These models with 2,200, 2,600 or 3,100 ANSI lumens brightness also have the 3 year deinstall/reinstall warranty for peace of mind and 3 year lamp warranty. Long life lamp of 6,000 hour in eco mode and long life filter of 5,000 hours are also good features for education.

Eiki projectors are increasingly being specified in large higher education installations, including Angela Ruskin University and the University of the West of Scotland.

An ideal unit for higher education is the Eiki LC-WUL100 which is WUXGA resolution with many useful features such as interchangeable lenses, corner keystone correction and 5000 ANSI.

Higher up the brightness scale with Eiki LC-HDT700 is a full 1080P projector featuring 7000 ANSI.

All Eiki projectors as standard receive 3 year or 6000 hour body only warranty with years 4 and 5 covered if under 3,000 hours.

Some models feature deinstall/reinstall warranty or loan exchange, which gives additional peace of mind to teachers. Some also feature 3 year lamp warranty, again giving peace of mind that additional expenditure is not incurred replacing lamps for three years.

EIKI

Audio Visual Materials Ltd., in conjunction with Wedgwood AV Ltd are happy to demonstrate Eiki to your University or College. Please telephone 01754 769967 to arrange this.

Higher education projectors

Eiki LC-WUL100

Eiki LC-HDT700

Classroom projectors

Eiki LC-XBM21 XBM26 XBM31

Eiki LC-WB200

• 01754 769967 • sales@wedgwood-group.com • www.wedgwood-group.com

AV cables and connectivity

Clever Little Box.

that take the hassle out of installing AV

Teachers now increasingly make use of technology in the classroom and it's common to have an interactive whiteboard, ceiling or wall mounted projector and perhaps an audio system which typically consists of a microphone, amplifier and either ceiling or wall mounted speakers.

Although you can purchase interactive whiteboards that do not use cables, or wireless projectors, the majority of the AV equipment within the classroom uses cables.

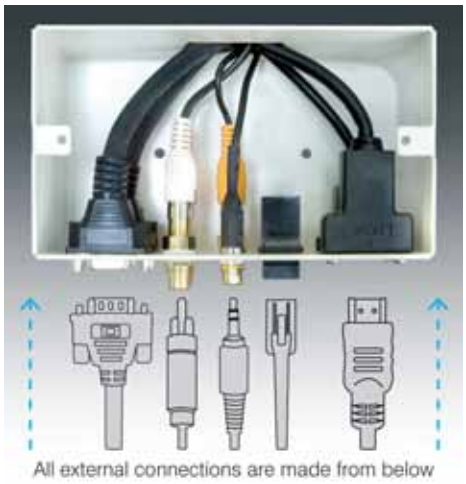
As teachers acquire other equipment such as a DVD player, printer or a visualiser, it is easy to end up with a multitude of trailing cables.

When installing AV equipment, cables may be routed by your installer to a faceplate near the teacher's desk. The faceplate has connectors so you can control the various technologies from one point, for example, turning up the speaker volume.

AV faceplates

The Clever Little Box single-gang AV faceplate (1GEIAVPLT) has VGA input for your computer, along with two phono sockets for computer audio (stereo). For your DVD etc., it has one composite phono video input with two phono sockets for stereo audio.

This means you can connect your PC monitor, audio source and PC network without the use of loads of trailing cables. Easy to install and convenient on either a single or double gang plate.



The Clever Little Box double-gang AV input plate (2GEIAVPLT) has two VGA sockets to connect two computers, one 3.5mm stereo jack for audio input (PC, MP3 player, etc). It has a USB connector and an RJ-45 network socket. For a DVD, etc., it has one composite phono video input with two phono sockets for stereo audio.

You can connect a printer via the USB. You can also connect anything that has left and right audio connectors, or can convert to them, so for example, a CD player might be able to go from a 3.5mm jack to phono connector in the faceplate. You could also connect a DVD player, provided it had phono connectors on the back (not all DVD players have these connectors).

Both plates are made from steel with solderless VGA sockets, for easy installation.

Pre-terminated wall box kits come with all installation cables already internally connected, for high speed 'plug and play' classroom installation. In 10m or 15m lengths, these wall box connections will give tidy, secure cable connectivity, from which teachers can control their AV equipment from one place.

A sound solution for classroom installation

NuVo in-wall amplifier system complements interactive whiteboards such as SMART Boards, ensuring that all pupils hear lessons clearly.

Maths and science might be complicated, but educational tools shouldn't be...

There are a variety of solutions for providing audio into your classrooms. Some schools opt for speakers down the side of the interactive whiteboard, with a separate amplifier and microphone. Others use a portable PA system, which allows them to easily transport the unit from room to room as required.

NuVo equips classrooms and other environments with a simple-to-use amplification option, which is designed for ample power and crisp audio reproduction.

The flexible 40 watt amplifier installs discreetly into the wall, and features two hard-wired rear source inputs, as well as two convenient front-access inputs for quick additions to the system.

You can operate the amplifier from where it is installed in the wall, or enjoy equally easy, portable control with the system's optional IR remote controller. Small mountable speakers round out the install, for an all-inclusive, answer to a classroom's amplification needs.

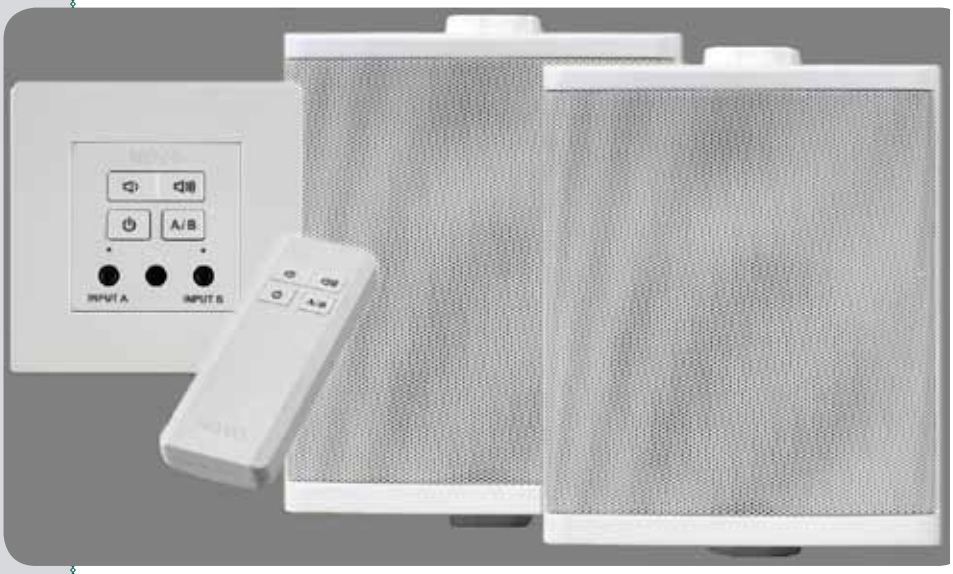
The disadvantage of this type of system is that you cannot remove it from room to room. However, in-wall systems are low-cost and beneficial where space is at a premium.

40 watt amplifier, perfect for delivering audio to any enclosed listening setting

Easy four-button control from both amplifier and optional IR remote controller

Both hard-wired rear source inputs and front-end source inputs for flexibility in using multiple devices with the system

Speakers included for a simple, all-inclusive approach to classroom amplification



NuVo WA-40 in-wall amplifier system

• 01754 769967 • sales@wedgwood-group.com • www.wedgwood-group.com

New technology enhances learning at Skegness Junior School

Darren Price, Deputy Head of Skegness Junior School in Lincolnshire, tells us about his learning with iPads project.

"We are keen to link with other schools using the same technologies to collaborate and move teaching and learning forwards" Darren Price

Skegness Junior School

At Skegness Junior School we are creating an exciting learning environment which encourages all to achieve personal success. One of the school aims is promote high standards of literacy and numeracy with a heavy focus on maths.

Using iPads in the classroom

Parents were invited to the school classroom to 'play' with iPads and see how their child was learning, using new touch technology. This was great fun and parents were reluctant to hand the iPads back afterwards. One of the applications being used for maths, had brightly coloured bubbles floating across the screen. Three of these bubbles had sums, such as 6+4, with three bubbles containing their answers. Children and parents had to match the right answer to the question and 'pop' both the bubbles with their finger. If the answer was correct, the bubbles popped and disappeared. Once all the bubbles had been popped, the application (App) moved onto the next level.

"My background was school improvement using game-based projects, such as the Wii and DS consoles, and this had a huge impact on learning," revealed Darren Price, the Deputy Head of Skegness Junior School.

"Last year we introduced iPads and iPods into our school and applications and saw the potential", said Darren, "It was a big outlay initially to purchase four classroom sets of iPads, but the applications are cheap and they link well into the curriculum."

Darren Price says that iPads are not a gimmick, although they are a novelty amongst the children, but it's what you do with them and how they are integrated into different subjects, that matters. The school has a heavy focus on maths as well as improving literacy.

They are developing writing skills using various applications. One of their favourites is *Epic Citadel*, which allows pupils to 'walk' round cities. Demonstrating this application for us, it was easy to focus on a point of interest and then zoom in. Dennis said the children then wrote about what they saw. This then paved the way for a group discussion as to why one chilld had focused on one aspect of the city, whilst another chose a different view.

The school use photo applications a lot for video production, filming the children doing lots of bits and pieces, especially science experiments. In a film the children can only relate to pictures, and can write about it, thus enabling each child to create an individual piece of writing. Unlike text, where each child then needs to visualise what the meaning of the text looks like.

The school purchased four sets of iPads for classroom use, either as a whole class or for smaller groups to work on. This gives them flexible working, using them for the right child at the right time.

Darren Price is encouraging other schools in the area to visit Skegness Junior School and look at how they are working with the children to encourage and develop learning using iPads and other interactive technology.

Skegness Junior School
www.skegness-jun.lincs.sch.uk

• 01754 769967 • sales@wedgwood-group.com • www.wedgwood-group.com

Prize winners

Lanta Orion Arc

Thank you to everyone who entered the prize draw from Issue 4 of Teaching Technology to win a Lanta LED lighting fixture.

Congratulations to Gail Murray from Cathays High School in Cardiff. Gail's entry was the first correct drawn at random by the computer from all entries into our prize draw in Issue 4 of Teaching Technology. The correct answer was 4.

Lanta Lighting has a range of LED lighting fixtures for stage and theatre, architectural lighting for indoor and outdoor, strobes, indoor floods and moving heads. They also manufacturer lasers and atmospheric effects such as bubbles, haze, smoke and snow machines.

Please do enter our latest prize draws, featured on the back cover of this issue of Teaching Technology, for a chance to win an Hitachi CP-X2021WN projector or one of 10 copies of Repeat Signage digital signage software.

Entry is free and open to all UK educational and training establishments.

Repeat Signage 2011 Standard Edition digital signage software

Congratulations to the 10 winners, all drawn at random from entries from Issue 4 of Teaching Technology, who have all now received their software licences.

SPECIAL OFFER A FREE Repeat Signage software licence worth £225+VAT with every projector, LCD monitor or interactive whiteboard over £500+VAT purchased from Wedgwood AV Ltd. www.wedgwood-group.com Please quote: TT06-RS

iPad mounts, arms and security solutions

As schools invest in iPads for the classroom, bracket manufacturers look to security solutions for recharging and storage. Here we look at what's available from two leading manufacturers - ErgoMounts and Top-Tec...

ErgoMounts range for iPads incorporate Quick release and secure iPad brackets, stands and articulated arms. The iPad can be secured to the desk with a tamper free enclosure or can be quick released when more mobility is required. Combination iPad / iPad2 and LCD / LED monitor stands are also available, as well as fixed secure workstations.

ErgoMounts EMUV420TD-IPS50

ErgoMounts EMVP501S-IPS50

ErgoMounts EMIPS75FSS

ErgoMounts EMVPF1280-IB-IPS70

ErgoMounts EM503FS

ErgoMounts EM820 Secure

ErgoMounts EM280IPS50

TOP-TEC range of mounts for iPads includes, iMac security shoe, iMac security slipper, iPad security bracket and iPad secure display. The latter is availble in a variety of colours and securely fixes to wall, desk, monitor mount or in a control housing for the Voyager2 lectern range or other desk product.

TOP-TEC iPad security bracket

TOP-TEC iPad secure display rotating wall mount and on an ENDO 82 arm

TOP-TEC iMac security shoe

• 01754 769967 • sales@wedgwood-group.com • www.wedgwood-group.com

NEC interactive whiteboard kit

A solution for schools when you want an interactive whiteboard without having to buy the board

NEC have brought out an innovative device that works with any NEC short-throw or ultra short-throw projector to transform an existing flat surface into an interactive workspace.

Many schools are already familiar with eBeam® technology, using their eBeam® devices to turn dry-wipe whiteboards into interactive whiteboards, thus making good use of existing boards.

The NEC NP01Wi2 interactive whiteboard kit uses eBeam® application software and stylus in combination with NEC's short-throw or ultra short-throw projectors, from the NEC U or M series, to transform any existing flat surface into an interactive area.

This device is quick and easy to install and is an easy upgrade of already installed NEC projectors.

The smallest supported capture area of an existing flat surface is 63-inch diagonal for the U-series (XGA); 77-inch diagonal for the WXGA model; 60-inch diagonal for the M short throw series (XGA) and 56-inch diagonal for the WXGA.

The largest supported capture area is 85-inch diagonal for the U series (XGA); 100-inch diagonal for the WXGA model; 85-inch diagonal for the M series (XGA) and 100-inch diagonal for the WXGA model.

The interactive whiteboard kit is installed on top of the projector and gives 50 hours of continuous use of battery life. It supports both Windows and Mac.

NEC M series short throw projector with the NP01Wi2 interactive whiteboard kit

NEC NP01Wi2 interactive whiteboard kit with mouse driver and software

NEC U series ultra short throw projectors

Example Installation of the NP01Wi2 interactive whiteboard kit with an NEC U Series projector

NEC M series of short throw projectors

NEC

Empowered by Innovation

- 01754 769967
- sales@wedgwood-group.com
- www.wedgwood-group.com

Sound systems

SoundPlus CHAmp PC30D portable wireless amplifier with DVD player with Pitch Control and choice of microphone

SoundPlus CHAmp MP3DVD portable wireless amplifier with MP3 recorder and DVD player and wireless handheld microphone

SoundPlus CHAmp DVDCA portable wireless amplifier which has a DVD player and cassette recorder

Portable PA systems have many uses in schools and colleges

Portable PA systems have many uses in schools and being portable are easily transported from classroom to assembly hall to school grounds for outdoor events such as sports day.

The SoundPlus CHA-mp range is an all-in-one wireless PA system with a built-in amplifier and speaker and choice of media player. For example, the PC30D model has a built-in DVD player with adjustable pitch control whilst the MP3DVD model has an MP3 recorder and DVD player. They each come with a choice of wireless microphone, either handheld or beltpack with tieclip microphone.

Whichever system you choose you can either connect it to the mains whilst in a classroom for example, or power it from its internal battery. It has RMS 100 Watt output of power, which is ample for most applications, but where you do require more volume, such as in a school field (in dry weather as the units aren't waterproof), you can connect an extension speaker to boost the output power by approximately 30%.

In a dance lesson for instance, you can have music playing, but when you want to give instructions over the microphone the voice-priority function allows the microphone to automatically override any internal or external sound sources during speech, but returning back to normal operation immediately after speech.

Other areas in the school day where a portable PA system is useful is in music lessons, at the school assembly, for parents' events to make announcements, in sports lessons or at the school fete.

For colleges and universities where you need to address larger groups of students such as in a lecture theatre, then an all-in-one lectern with built-in audio is an option. The lectern includes a loud speaker which is mounted in a detachable cabinet. It can be used either within the lectern furniture or brought out to mount on a speaker stand and there is an output to the detachable loud speaker cabinet.

- **01754 769967**
- **sales@wedgwood-group.com**
- **www.wedgwood-group.com**

Chance for you to win prizes in our free prize draws

Win an Hitachi CP-X2021WN projector

Hitachi CP-X2021WN projector is designed for teaching environments. It delivers a superb high contrast image. With wireless network capabilities and simple user functionality, teachers and students can set up their presentations in seconds.

- XGA Resolution
- 2200 ANSI Lumens Normal Mode
- 1400 ANSI Lumens Eco Mode
- 2000:1 Contrast Ratio (Intelligent Eco)
- Long Lamp life – up to 5000 hours (Eco Mode)
- Hybrid Filter – up to 5000 hours (Eco Mode)
- Virtually maintenance free
- Optional Wireless Networking
- Full connectivity including 1 x RJ-45 & 1 x HDMI
- Crestron Room View
- Less than 0.4W power consumption in standby.

For a chance to win an Hitachi projector, simply answer the following question.

What is the name of Hitachi's software that is included with the iPJ-AW250NM interactive projector?

To enter the prize draw, simply go to www.teachingtechnology.co.uk and create a free online account. Login and click on the 'Competitions' link and enter your answer. Closing date is midnight on 30 June 2012.

Free prize draw rules: Teaching Technology competitions are only available to the staff of UK educational establishments. Winners will be selected at random by the editor from all correct entries received by midnight on 30 June 2012.. The winning educational establishment will be notified as soon as reasonably practicable after the competition draw. One entry per person. Multiple entries will be discarded. The editor's decision is final and no correspondence will be entered into. There are no cash alternatives.

10 copies of Repeat Signage 2011 Standard Edition digital signage software to be won

RepeatSignage 2011
Repeat Signage 2011
Digital Signage Solutions
The most versatile, yet easy to use digital signage software around...
www.repeatsignage.com

Repeat Signage 2011 is truly flexible digital signage software for Windows. It allows pixel-by-pixel control of displays including plasma screens, LCD monitors and projectors. It is one of the easiest to use digital signage packages on the market. You simply design the presentation for the resolution of your screen. Includes touch screen capability.

RepeatSignage 2011

Digital download only

Free prize draw
For your chance to win one of ten prizes of a downloadable copy of this flexible digital signage software, all you have to do is download a free trial copy at www.repeatsoftware.com Then open the software and look at the bottom of the main screen. You will see a 4 digit code in the format TT 0000.

To enter the prize draw, simply go to **www.teachingtechnology.co.uk** and create a free online account. Login and click on the 'Competitions' link to enter the 4 digit number. Closing date is midnight on 30 June 2012.

Wedgwood AV Limited

Wedgwood AV Ltd. Part of Wedgwood IT Group. www.wedgwood-group.com